

CONDITIONING DISK

Abstract

An abrasive article includes a plurality of abrasive particles securely affixed
5 to a substrate with a corrosion resistant matrix material. The matrix material
includes a sintered corrosion resistant powder and a brazing alloy. The brazing
alloy includes an element which reacts with and forms a chemical bond with the
abrasive particles, thereby securely holding the abrasive particles in place. A
method of forming the abrasive article includes arranging the abrasive particles in
10 the matrix material, and applying sufficient heat and pressure to the mixture of
abrasive particles and matrix material to cause the corrosion resistant powder to
sinter, the brazing alloy to flow around, react with, and form chemical bonds with
the abrasive particles, and allow the brazing alloy to flow through the interstices of
the sintered corrosion resistant powder and form an inter-metallic compound
15 therewith.